CLAIMS:

1. A method of noise filtering an image sequence (*VI*), characterized in that the method comprises:

determining (11) statistics in at least one image of the image sequence (*VI*); and

calculating (14) at least one filtered pixel value ($P_t$') from a set of original pixel values ($P_t$,$M_i$) obtained from the at least one image, wherein the original pixel values ($P_t$,$M_i$) are weighted (13) under control (12,$\alpha$) of the statistics (11).

2. A method as claimed in claim 1, wherein the step of calculating comprises:

weighting (13) the set of original pixel values ($P_t$,$M_i$) under control (12,$\alpha$) of the statistics (11) to obtain a weighted set of pixel values ($P_t$,$N_i$); and

furnishing the weighted set of pixel values ($P_t$,$N_i$) to a static filter, in which static filter the at least one filtered pixel value ($P_t$') is calculated from the weighted set of pixel values ($P_t$,$N_i$).

3. A method as claimed in claim 1, wherein the statistics (11) include a spatial and/ or temporal spread (S) of the set of original pixel values ($P_t$,$M_i$).

4. A method as claimed in claim 3, wherein the spatial and/ or temporal spread (S) is a sum of absolute differences, a given absolute difference being obtained by subtracting an average pixel value from a given original pixel value ($P_t$,$M_i$).

5. A method as claimed in claim 1, wherein the set of original pixel values ($P_t$,$M_i$) include a central pixel value ($P_t$) and spatially and/or temporally surrounding pixel values ($M_i$), wherein as a result of the noise filtering, the central pixel value ($P_t$) is replaced by the filtered pixel value ($P_t$').

6. A method as claimed in claim 2, wherein the set of weighted pixel values ($P_t$,$N_i$) is obtained by taking for each pixel in the set of original pixels ($P_t$,$M_i$), a combination

of a portion $\alpha$ of the original pixel value ($P_t$,$M_i$) and a portion 1-$\alpha$ of a central pixel value ($P_t$).

7. A method as claimed in claim 1,

wherein the statistics (11) are furnished to a look-up table (12), from which look-up table (12) a control signal ($\alpha$) is obtained, which control signal ($\alpha$) controls the weighting (13).

8. A method as claimed in claim 2,

wherein the at least one filtered pixel value ($P_t$') is obtained by calculating (14) a median of the weighted set of pixel values ($P_t$,$N_i$).

9. A method as claimed in claim 2,

wherein the at least one filtered pixel value ($P_t$') is obtained by calculating (14) an average of the weighted set of pixel values ($P_t$,$N_i$).

10. A method as claimed in claim 9, the method comprising:

determining (41) a spatial spread ($S_{spat}$) calculated from spatially displaced original pixel values ($P_t$,$M_i$) in the set of original pixel values ($P_t$,$M_i$,$P_{t1}$,$P_{t2}$);

determining (42) a temporal spread ($S_{temp}$) calculated from temporally displaced original pixel values ($P_t$,$P_{t1}$,$P_{t2}$) in the set of original pixel values ($P_t$,$M_i$,$P_{t1}$,$P_{t2}$); and

weighting (46) the spatially displaced original pixel values ($P_t$,$M_i$) under control (43) of the spatial spread ($S_{spat}$) and the temporally displaced original pixel values ($P_t$,$P_{t1}$,$P_{t2}$) under control (44,45) of the temporal spread ($S_{temp}$).

11. A method as claimed in claim 10, wherein the weighted temporally displaced original pixel values ($WP_1$,$WP_2$) are divided (a) to lessen their weight in the filtering (47).

12. A method as claimed in claim 10, wherein the temporally displaced original pixel values include two original pixel values ($P_{t1}$,$P_{t2}$) from different fields in a same frame ($F_0$) and at least one original pixel value of a previous frame ($F_{-1}$).

13. A method as claimed in claim 12, wherein filtered temporally displaced pixel values are used rather than temporally displaced original pixel values.

14. A method of encoding (1) an image sequence (*VI*), wherein the image sequence (*VI*) is noise filtered according to a method as claimed in claim 1.

15. A device for noise filtering an image sequence, the device comprising:

computing means (11) for determining statistics in at least one image of the image sequence (*VI*); and

filtering means (14) for calculating at least one filtered pixel value ($P_t$') from a set of original pixel values ($P_t$,$M_i$) obtained from the at least one image, wherein the original pixel values ($P_t$,$M_i$) are weighted (13) under control (12,$\alpha$) of the statistics (11).

16. A device for encoding (1) an image sequence (V1), the device comprising a device for noise filtering as claimed in claim 15.